

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN**

WISCONSIN ALUMNI RESEARCH
FOUNDATION,

Plaintiff,

v.

APPLE INC.,

Defendant.

Case No. 3:14-cv-00062-wmc

Amended Joint List of Admitted Trial Exhibits

The parties have meet and conferred and agree that the following exhibits have been admitted into evidence during the trial in this case. This updates and supplements the Joint List of Admitted Trial Exhibits filed on October 14, 2015 at Dkt. 620.

Exhibit No.	Description	Phase
0001	Ribbon Copy of U.S. Patent No. 5,781,752	Phase 1
0003A	Article, Dynamic Speculation and Synchronization of Data Dependencies by Andreas I. Moshovos, Scott E. Breach, T. N. Vijaykumar, Guri. S. Sohi (more legible print)	Phase 1
0005	Presentation, Computing with Billion Transistor Chips, by Guri Sohi, University of Wisconsin - Madison, 1997	Phase 1
0008	Cyclone and Typhoon Software Tuning Guide, Version 2.0.0	Phase 1
0014	Email from Mylius to Meier re: Some preliminary LSD dependency predictor results (+ the no full analysis result)	Phase 2
0015	Email from Meier to Williams re LSD predictor update (not very good news I'm afraid...) and attachment	Phase 2

Exhibit No.	Description	Phase
0017	Email from Meier to Mylius re: LSD predictor update (not very good news, I'm afraid...)	Phase 1
0018	Email from Meier to Mylius re: predictor verification	Phase 1
0020	Email from Hakewill to Mylius re: Load/Store ordering violations when LSP turned off, with attached spreadsheet	Phase 2
0023	Email from Drance to Broderick re 2x it is?	Phase 2
0028	Email from Drance to Santhanam re: Recap	Phase 2
0031	Email from Drance to Drebin re: Game developer	Phase 1
0034	SOC 2014 Preview: H7, Presentation deck	Phase 2
0041	Cyclone LSU (Load / Store Unit) Microarchitecture Specification, Rev. 1.1 (4/2/2012)	Phase 1
0044	Cyclone Datasheet and Integration Guide, Revision 0.68	Phase 1
0045	Cyclone LSD Micro-Architecture Description, Rev. 0.3 (9/13/2011)	Phase 1
0047	Email from Meier to Mylius re: Load don't bypass stores	Phase 2
0049	Article, Memory Dependence Prediction Using Store Sets, by Chrysos, G. Z. & Emer, J.S., Proceedings of the 25th Annual International Symposium on Computer Architecture, June 1998, at 142-153	Phase 1
0052	CDM All Hands, Apple presentation	Phase 2
0057R	REDACTED Email from Santhanam to Williams re: Follow ups	Phase 2
0058	Email from Meier to Cyclone Architecture Group re: Load Store Dependency (LSD) predictor hashing experiment results	Phase 1
0060	Email from Bannon to Williams re LSD predictor	Phase 1
0063	Email from Thelen to Ziesler re: Waitq deadlock panic sync meeting agenda	Phase 2
0071	Email from Drance to Law et al. re: General H6 marketing updates	Phase 2

Exhibit No.	Description	Phase
0073	Email from Vats to Rajagopal re 3D Mark Physics Test	Phase 1
0076	Total iPhone Chips manufactured at Samsung TX Plant	Phase 2
0083	Cyclone Mapper, Dispatch and Retirement (MDR) Micro-architecture Specification, Revision 1.6	Phase 1
0094	Apple-Samsung Master Development and Supply Agreement	Phase 2
0106	Email from Beck to Srouji re Chip Industry Update	Phase 2
0111	Email from Myszewski to Santhanam re: 2x it is?	Phase 2
0112	Email from Drance to Bannon re: Geekbench source code	Phase 2
0142	Apple RTL Source Code	Phase 1
0148	AnandTech, Intel Core versus AMD's K8 architecture	Phase 2
0151	Photograph of ACM Sigarch 2010 Maurice Wilkes Award to Andreas Moshocos - view 3	Phase 1
0161	System on a Chip Presentation	Phase 2
0187	Cyclone Program Update Slides	Phase 2
0198	Email from Mylius to Meier re LSD Power optimizations	Phase 2
0201	Email from Meier to Williams re: running Dhrystone without an LSD predictor	Phase 2
0210	Meier email to Mylius re NEW LSD counter elimination data	Phase 2
0211	Cyclone Concept Review Slides	Phase 2
0227	Email from Srouji to Drance re: Notes on SoC section	Phase 1
0256	Cyclone Concept Review Mobile Silicon Group Slides	Phase 2
0259	H6 Performance and Power Update	Phase 2
0274	Letter from Colwell to WARF NAMED Professorship Committee	Phase 1
0276	Cyclone User Manual, Rev. 1.59	Phase 1

Exhibit No.	Description	Phase
0279	Email from Drance to Lamiriaux re For Our Discussion	Phase 2
0319	Email from Drance to Bruno re: Slides so far	Phase 2
0325	Email from Meier to Mylius re Re: store to load data delay results	Phase 2
0326	iPhone Buyer Survey, Apple Market Research & Analysis FY14-Q1 (October, November, December)	Phase 2
0339	Email from Kumar to Vats re: Typhoon Performance Recovery (10/29/2012)	Phase 2
0356	Swift vs Eagle Update	Phase 2
0359	Email from Vats to Kumar re Updates	Phase 2
0385	Dynamic Synchronization of Data Dependencies by Moshovos Presentation	Phase 1
0394	University of Wisconsin-Madison, Invention Record and Report	Phase 1
0410	Email from Vijaykumar to G. Sohi and J. Smith re progress	Phase 1
0416	Article, Integrated Predicated and Speculative Execution in the IMPACT EPIC Architecture, by August et al.	Phase 1
0452	Moshovos email to distribution re ASPLOS Reviews (fwd)	Phase 1
0461	Email from Moshovos to breach@neufchatel.cs.wisc.edu et al re ISCA 97 paper number 186 (fwd)	Phase 1
0463	Email from Pucci to Sethuraman re: Your inquiry with Apple	Phase 1
0464	Confidential Settlement, Release, and License Agreement between WARF and Intel	Phase 2
0466A	REDACTED Presentation re Helping Invent a Better World by supporting research at the Univ of WI/Madison	Phase 1
0468	E-mail from iplaw@apple.com to Pucci re: Auto-Response: Apple has received your message	Phase 1
0493-1	Excerpt from Apple Keynote Event September 2013 (video)	Phase 2

Exhibit No.	Description	Phase
0524	Apple - iPhone 5s - Technical Specifications, https://www.apple.com/iphone-5s/specs/	Phase 2
0525	Apple iPhone 6 Technology, https://www.apple.com/iphone-6/technology/	Phase 2
0601	Article, Sohi Wins Eckert-Mauchly Award, IEEE Computer Society	Phase 1
0640R	REDACTED Exhibits A-E to the Expert Report of Glenn Reinman	Phase 2
0646R	REDACTED Exhibits A-C to the Expert Report of Murali Annavaram	Phase 2
0681R	REDACTED All Apple Discovery Responses	Phase 1
0687	Alcatraz Project Requirements Document	Phase 2
0696R	REDACTED July 18, 2012 Letter from Apple Containing Discussion of "Two Types of Technology: Standardized and Product-Differentiating"	Phase 2
0705	16401DOC000844 - 1846, 87002DOC000001-236; EV6 Source Code	Phase 1
0713	87001DOC000274 - 376; EV6 Specification, Rev. 1.0	Phase 1
0717	87001DOC000545 - 597; EV6 Specification, Rev. 2.0	Phase 1
0770	APL-WARF_0000001880 - 1889; U.S. Patent No. 5,615,350 (Hesson et al.)	Phase 1
0771	APL-WARF_0000001890 - 1943; U.S. Patent No. 5,619,662	Phase 1
0845	APL-WARF_0000004918 - 4928; Gallagher, David M., et al., Dynamic Memory Disambiguation Using the Memory Conflict Buffer	Phase 1
0865	APL-WARF_0000006474 - 6489; Moshovos, Andreas et al., A Dynamic Approach to Improve the Accuracy of Data Speculation	Phase 1
0880	APL-WARF_0000007153 - 7166; A study of Branch Prediction Strategies	Phase 1
0932	APL-WARF_0000027210 - 27216; iPad Air tech specs	Phase 2

Exhibit No.	Description	Phase
0934	APL-WARF_0000027268 - 27274; iPad Mini with Retina Display tech specs	Phase 2
0936	APL-WARF_0000028177 - 28191; iPhone 5S features	Phase 2
0937	APL-WARF_0000028208 - 28214; iPhone 5S tech specs	Phase 2
0998A	REDACTED APL-WARF_0000462571 - 462574; Email from Drance to Williams regarding story "Birth of the Cyclone and 64-bits"	Phase 1
1009	APL-WARF_0000485728 - 485743; Draft Non-Exclusive License Agreement	Phase 2
1025	APL-WARF_0000747862 - 747877; A286_Technology Properties Limited (TPL)	Phase 2
1026	APL-WARF_0000747996 - 748020; A404_Graphics Properties Holdings_2012-09-13_AGT_signatures pages included Apple-GPH-1	Phase 2
1027	APL-WARF_0000748021 - 748057; A441_Bridge Crossing LLC-MIPS-AST_2013-02-14_	Phase 2
1036	APL-WARF_0000800668 - 800678; Settlement Agreement between Opti and Apple	Phase 2
1115	APL-WARF_0001195424 - 1195429; iPad Air 2 Design	Phase 2
1119	APL-WARF_0001195455 - 1195463; iPad Air 2 Tech Specs	Phase 2
1133	APL-WARF_0001195614 - 1195626; iPhone 6 Tech Specs	Phase 2
1138	APL-WARF_0001207772 - 1207851; Letter from RPX Corp. to Luitton re Saxton Patent agreement	Phase 2
1174	APL-WARF_0001369317 - 375; CPU Monthly Update, October 17, 2013	Phase 2
1226	APL-WARF_0001372127 - 1372155; U.S. Patent 8,775,757	Phase 2
1264	APL-WARF_0001401793 - 823; Chen, William Y. et al., Profile-Assisted Instruction Scheduling 1994	Phase 1

Exhibit No.	Description	Phase
1265	APL-WARF_0001401824 - 1952; Chen, William Yu Wei, Jr., Data Preload for Superscalar and VLIW Processors	Phase 1
1290	APL-WARF_0001445336 - 1445337; Apple 5th Bid Letter	Phase 2
1292	APL-WARF_0001446201 - 1446375; Architecture License Agreement between ARM Limited and Apple Inc. (Donaldson Deposition Exhibit 5)	Phase 2
1312	APL-WARF_0001628963 - 980; Chen, W. et al., Using Profile Information to Assist Advanced Compiler Optimization and Scheduling	Phase 1
1330	APL-WARF_0001724942 - 1725157; D1.0 iPhoneRB FY14Q2 Global	Phase 2
1333	APL-WARF_0001727499 - 1727716; iPhone buyer FY14Q3 Report	Phase 2
1344	APL-WARF_0001729755 - 780; U.S. Patent No. 6,662,237	Phase 2
1345	APL-WARF_0001729834 - 875; U.S. Patent No. 6,970,997	Phase 2
1346	APL-WARF_0001729921 - 941; U.S. Patent No. 7,415,597	Phase 2
1347	APL-WARF_0001730007 - 025; U.S. Patent No. 8,468,325	Phase 2
1348	APL-WARF_0001730226 - 245; U.S. Patent No. 8,464,029	Phase 2
1352	APL-WARF_0001730588 - 602; U.S. Patent No. 8,856,447	Phase 2
1475	APL-WARF_0001749781 - 1749797; Weiss-white-paper-on-Dhrystone	Phase 2
1483	APL-WARF_0001749851 - 1749867; Apple - iPhone - Compare Models	Phase 2
1582	APL-WARF-T_00003090; Videos demonstrating the performance testing performed by Dr. August	Phase 2
1608	Exhibit 3 to Rebuttal Expert Report of David August, Ph.D. Regarding Damages, dated July 3, 2015 (Composite Data sheet)	Phase 2

Exhibit No.	Description	Phase
1630	Papworth Deposition Exhibit 5: Accused Intel CPU Processors Net Billing Unit, 2006-2014; As cited in Julie Davis expert report	Phase 2
1631	Papworth Deposition Exhibit 6: Accused Intel CPU Processors Net Billing Unit, 2006-2014, Expanded Scope; As cited in Julie Davis expert report	Phase 2
1632	Physical Exhibit: A7 chip	Phase 1
1636	Physical Exhibit: iPad Air2	Phase 1
1640	Physical Exhibit: iPhone 5s	Phase 1
1645	Physical Exhibit: Teardown of iPhone 5s	Phase 1
1656	U.S. Patent 9,128,725	Phase 2
1665	WARF0003332 - 3506: Memory Dependence Prediction by Andreas Moshovos	Phase 1
1669	WARF0009880; November 7, 2000 Letter from Jerry Shattuck to AMD regarding AMD's possible interest in licensing the '752 patent (Shattuck Deposition Exhibit 9)	Phase 1
1671	WARF0009888; November 7, 2000 Letter from Jerry Shattuck to Hewlett-Packard Company regarding HP's possible interest in licensing the '752 patent (Shattuck Deposition Exhibit 10)	Phase 1
1672	WARF0009889 - 9892; Letter from Shattuck re Inquiry into possible interest in licensing	Phase 1
1674	WARF0009896; Gulbrandsen Deposition Exhibit 19: Letter to Compaq Computer Corporation, dated November 7, 2000	Phase 1
1677	WARF0012931 - 12948; WARF Market Analysis Report by Nadia Sifri, Valuation of Gurindar Sohi's Technology in the Core 2 Duo (aka Conroe) (Shattuck Deposition Exhibit 17)	Phase 2
1688	WARF0052792; January 2, 2001 Correspondence from Jerry Shattuck to Sun Microsystems re possible interest in licensing the '752 patent (Shattuck Deposition Exhibit 8)	Phase 1
1698	WARF0091946 - 91948; Email from Moshovos to Chrysos, 15512 Moshovos Ex. 17	Phase 1

Exhibit No.	Description	Phase
1700	WARF0092090 - 92101; ASPLOS Reviews Moshovos Ex. 24	Phase 1
1714	WARF0140698 - 140738; Gelsinger, Into the Core . . .	Phase 2
1723	APL-WARF_0001729584 - 1729585; Apple - Legal - Unsolicited Idea Submission Policy	Phase 1
1725	APL-WARF_0001728927 – 929 Email from iplaw@apple.com to Anand Sethuraman attaching Pucci, Paul.vcf re University of Wisconsin Technology that may be of interest	Phase 1
1870	APL-WARF_0000212223 - 318; iPhone 5s and iPhone 5c Early Buyer Survey (U.S. & China)	Phase 2

The parties have considered this list for exhibits expected to be used during the final day of trial tomorrow, October 16, 2015 but nevertheless, reserve the right to move the admission of any exhibits used during tomorrow's proceeding and include those exhibits on an updated list.

Respectfully submitted,

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